Math 824, Fall 2012
Final Project (First Announcement)

Summary

Read a current research article in combinatorics, give a short talk on it to an audience of fellow graduate students, and provide constructive criticism on another student's talk.

Article selection

Each student enrolled in Math 824 should meet with Jeremy individually to select a paper to read. There is a list (by no means exhaustive) of possible papers, mostly arXiv preprints, on the course website. If none of these appeal, think about a topic you like and search MathSciNet for published papers (requires KU login) and the arXiv for preprints. You must get final approval from Jeremy (two students cannot read the same article). You should have your article chosen by no later than **Friday, October 28.**

Talks

The goal of your talk is to help a fellow graduate student to become familiar with the main ideas of the article. Of course, you need to understand the paper well yourself in order to explain it to others, but you do not necessarily have to prove anything in your talk (and you probably won't have time to do so anyway). You should rehearse your talk at least once, if not several times, before presenting it.

Logistics

There are 10 students enrolled in the class, so scheduling everyone is going to be tricky. Here is what I propose:

- The final exam is scheduled for **Friday, December 14, 10:30 AM –1:00 PM.** We will have five of the ten talks during that time slot.
- I will reserve a room for a two-and-a-half-hour slot on **Thursday, December 13**. We will have the other five talks then.
- You are required to attend at least one of these two sessions. I encourage everyone to attend both, but it's not a requirement in case you have a scheduling conflict (e.g., another final exam).
- If you have any scheduling conflicts on Thursday 12/13, let me know when you choose your article, so I can try to avoid them. (Here is the official KU exam schedule.)
- I will bring food (unfortunately, beer is not allowed on campus).

Constructive criticism

Each student will be responsible for providing a written critique of (at least) one other student's talk. I will assign critiquers after everyone chooses their articles. In your critique, you should address these questions:

- What did the speaker explain as the major themes (e.g., definitions, methods, or theorems) of the article?
- What do you now know that you didn't 20 minutes ago?
- What other mathematical ideas came to mind as you listened to the talk?
- What else would you like to know?
- What could the speaker have done differently to help you understand the article?

As always when giving constructive criticism to a mathematical colleague, you should be both candid and respectful.